Natural Communities of Louisiana





Salt Dome Hardwood Forest

Rarity Rank: S1/G1



Synonyms: None

Ecological Systems: CES203.466 West Gulf Coastal Plain Chenier and Upper Texas Coastal Fringe Forest and Woodland

General Description:

- Restricted to salt domes in coastal Louisiana called the "Five Islands"
- Developed on fertile, circum-neutral to slightly alkaline loessial deposits over salt dome cap rock
- Upland hardwood dominated forest similar to hardwood slope or Southern mesophytic forests
- Highly erodible loess soils that have worn over thousands of years to form a characteristic well-dissected landscape of high, narrow ridges, steep slopes, and deep ravines
- Topographic characteristics of the region create a relatively cool, moist micro-climate on the slopes and in the ravines

Plant Community Associates

Common overstory tree species include:

Quercus virginiana (live oak)
Quercus pagoda (cherrybark oak)
Celtis laevigata (hackberry)
Tilia americana var. caroliniana (basswood)
Carya glabra (pignut hickory)

Common midstory & understory species include:

Prunus caroliniana (cherrylaurel)
Sabal minor (dwarf palmetto)
Aesculus pavia (red buckeye)
Parthenocissus quinquefolia (Virginia creeper)
Vitis rotundifolia (muscadine grape)
Ampelopsis arborea (peppervine)

Magnolia grandiflora (Southern magnolia) Ulmus americana (American elm) Liquidambar styraciflua (sweetgum) Quercus nigra (water oak)

Ilex vomitoria (yaupon)
Callicarpa americana (french mulberry)
Asimina triloba (pawpaw)
Smilax rotundifolia (common greenbriar)
Toxicodendron radicans (poison ivy)
Smilax bona-nox (saw greenbriar)

Common herbaceous layer species include:

Oplismenus hirtellus ssp.setarius (bristle basketgrass) Sanicula canadensis (black snakeroot) Malvaviscus arboreus var. drummondii (wax mallow) Rubus spp. (blackberry) Elephantopus carolinianus (Carolina elephant's foot)

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Common epiphytes include:

Tillandsia usneoides (Spanish moss)
Polypodium polypodioides (resurrection fern)

Phoradendron tomentosum (mistle-toe)

Federally-listed plant & animal species:

Ursus americanus luteolus (Louisiana black bear)

Threatened; G5T2; S2

Range:

Gulf Coast Prairies and Marshes ecoregion in the southwest portions of Louisiana; specifically restricted to the five salt domes, or "islands" of south central Louisiana: Avery, Belle Isle, Cote Blanche, Jefferson, and Weeks Islands.

LA River Basins:

Atchafalaya, Vermilion-Teche

Threats:

- Industrial activities
- Residential development
- Construction of roads, pipelines and utilities
- Invasive exotic species
- Overgrazing

Parishes Coastal Zone Range in LA

Beneficial Management Practices:

- Prevent conversion of existing natural forests to other land uses
- Maintain natural species composition by following appropriate hardwood management techniques
- No harvesting on steep slopes and during wet periods to prevent soil damage
- Remove any invasive exotic plant species with use of spot herbicides or mechanical means
- Prohibit off-road vehicle use or restrict use to existing trails
- Prohibit livestock grazing

